REMARKS

Claims 1-42 are pending and stand rejected.

1. The Office Action rejected claims 3-5, 17-19, and 31-33 under 35 USC 103(a) as being obvious over Chiang (United States Patent No. 6,477,523) in view of Campos (United States Publication No. 2003/0212702).

Applicant respectfully disagrees. Chiang does not teach or suggest determining an average height of the histogram buckets, as required by claims 3, 17, and 31. The average height of the histogram buckets is computed to determine where a reclassification threshold should be set. Each value that exceeds the reclassification threshold is then represented in a high-bias bucket. See claims 3, 17, and 31. The use of the term "reclassification" indicates that this process is performed after values have already been classified to a bucket.

In contrast, Chiang's process is performed before classification begins. Chiang computes a Global Interval Size, which is "the average number of rows to be fitted in one interval. In one embodiment, this is set to be the total number of rows in the table divided by 100." Thus, in Chiang, the computation of the average number of rows to be fitted in one interval occurs before the values are classified to buckets. Thus, Chiang and the combination of Chiang and Campos proposed in the Office Action do not include the "determining the average height of the histogram" element of claims 3, 17, and 31. Thus, claims 3, 17, and 31, and claims 4-5, 18-19, and 32-33, are not obvious over the combination of Chiang and Campos. Applicant respectfully requests that the rejection of claims 3-5, 17-19, and 31-33 be withdrawn.

2. The Office Action rejected claims 5, 19, and 33 under 35 USC 103(a) as being obvious over Chiang in view of Campos.

Applicant respectfully disagrees. Chiang does not teach or suggest repeating the steps of claims 3, 17, and 31, respectively, until no value exceeds the reclassification threshold as required by claims 5, 19, and 33. Chiang makes one pass through the records and does not go back and reclassify the records. Chiang, col. 7, lines 7-31. Applicant respectfully requests that the rejection of claims 5, 19, and 33 be withdrawn.

3. The Office Action rejected claims 6-8, 20-22, and 34-36 under 35 USC 103(a) as being obvious over Chiang in view of Campos.

Applicant respectfully disagrees. Chiang does not teach or suggest determining an average height of the histogram buckets, as required by claims 6, 20, and 34. The reasoning for this argument is described above with respect to claims 3, 17, and 31.

Further, Chiang does not teach or suggest for each value that exceeds the reclassification threshold, representing the value in a high-bias bucket if all of the high-bias buckets are not full, as required by claims 6, 20, and 34. Chiang describes allocating rows to loner categories, Chiang, col. 7, lines 14-31, but does not teach or suggest determining if the high-bias buckets are not full, as required by claims 6, 20, and 34.

Further, neither Chiang nor Campos teach or suggest determining if the number of high-bias buckets is less than a fixed number of high-bias buckets, as required by claims 6, 20, and 34. While Chiang describes having a maximum number of loners that is used in an equation to determine if a row is a loner, Chiang, col. 7, lines 21-28, Chiang does not describe using that maximum number to determine if the number of high-bias buckets is less than a fixed number of high-bias buckets. Campos does not describe having a fixed number of high-bias buckets.

Thus, for the above reasons, claims 6, 20, and 34 are not obvious over Chiang in view of Campos. Similarly, claims 7-8, 21-22, and 35-36, which depend from claims 6, 20, and 34, respectively, are not obvious over Chiang in view of Campos. Applicant respectfully requests that the rejections of claims 6-8, 20-22, and 34-36 be withdrawn.

4. The Office Action rejected claims 9-13, 23-27, and 37-41 under 35 USC 103(a) as being obvious over Chiang in view of Campos.

Applicant respectfully disagrees. Neither Chiang nor Campos teach or suggest determining a remaining number of buckets equal to a total number of buckets minus the number of high-bias buckets used, as required by claims 9, 23, and 37. The Office Action recites a portion of Chiang in which Chiang describes a technique for identifying rows as Loners. Chiang, col. 7, lines 14-18. This portion of Chiang does not, however, teach or disclose

determining the remaining number of buckets equal to a total number of buckets minus the number of high-bias buckets used, as required by claims 9, 23, and 37.

Further, neither Chiang nor Campos teach or suggest determining if the number of remaining buckets is greater than a stop number of buckets, as required by claims 9, 23, and 37. Neither Chiang nor Campos teach or suggest a stop number of buckets.

For the above reasons, claims 9, 23, and 37 are not obvious over Chiang in view of Campos. Similarly, claims 10-13, 24-27, and 38-41, which depend from claims 9, 23, and 37 are not obvious over Chiang in view of Campos for at least the same reasons. Applicant respectfully requests that the rejection of claims 9-13, 23-27, and 37-41 be withdrawn.

5. The Office Action rejected claims 10, 24, and 38 under 35 USC 103(a) as being obvious over Chiang in view of Campos further in view of Mozes (United States Patent No. 6,691,099).

Applicant respectfully disagrees. Mozes does not describe setting the minimum percentage of rows to 1/FB %, where F is equal to a number of high-bias values that each high-bias bucket can contain and B is equal to the total number of buckets, as required by claims 10, 24, and 28. Mozes col. 4, lines 47-54 does not describe multiplying F, the number of high-bias values that each high-bias bucket can contain, by B, the total number of buckets, and dividing the product into 1. Similarly, Chiang and Campos do not describe this process. Applicant respectfully requests that the rejections of claims 10, 24, and 38 be withdrawn.

6. The Office Action rejected claims 11, 25, and 39 under 35 USC 103(a) as being obvious over Chiang in view of Campos further in view of Mozes (United States Patent No. 6,691,099).

Applicant respectfully disagrees. Mozes does not describe setting the minimum percentage of rows to V(FB-I)/FB %, where F is equal to a number of high-bias values that each high-bias bucket can contain, B is equal to the total number of buckets, V is equal to the minimum percentage of rows, and I is equal to the number of values represented by the high-bias buckets. Mozes col. 4, lines 47-54 does not describe this calculation. Applicant respectfully requests that the rejections of claims 11, 25, and 29 be withdrawn.
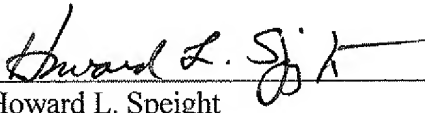
7. The Office Action rejected claims 13, 27, and 41 under 35 USC 103(a) as being obvious over Chiang in view of Campos further in view of Mozes (United States Patent No. 6,691,099).

Applicant respectfully disagrees. None of Chiang, Campos, or Mozes teach or suggest the repetition of steps as required by claims 13, 27, and 31. Applicant respectfully requests that the rejection of claims 13, 27, and 31 be withdrawn.

SUMMARY

Applicant contends that the claims are in condition for allowance, which action is requested. Applicant does not believe any fees are necessary with the submitting of this response. Should any fees be required, Applicant requests that the fees be debited from deposit account number 14-0225, Order Number 11303.

Respectfully submitted,

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